Data Tables

|  |  |  |  |
| --- | --- | --- | --- |
| Test/Flask | Condition | Fermentation observed | Gas produced cm3 |
| **Temperature**  A | Sucrose + Ice | 25min  only a few bubbles on the top of the solution | 4cm |
| 35 min.  Basically the same as the last measurement | 6cm |
| 45min.  Balloon is not standing up and there is no change from last time | 6cm |
| B | Sucrose + Room Temp | 25min  About a half of an inch of bubbles on the top | 12cm |
| 35 min.  A lot of change, with bubbles almost to the balloon | 14.5cm |
| 45min.  Balloon is standing upright and is very expanded | 16.5cm |
| C | Sucrose + 40°C | 25min  Balloon is expanded and hard, bubbles are all the way up to the balloon | 20.5cm |
| 35 min.  Noticeable change and it looks like bubbles are in the balloon | 23cm |
| 45min.  Very large and expanded balloon that is standing upright | 23.5cm |
| D | Sucrose + 80°C | 25min  About a fourth of an inch of bubbles on top of the solution | 12.5cm |
| 35 min.  Only a little change with bubbles at the same level | 13cm |
| 45min.  Balloon is not standing up and there is little or no change | 13.5cm |
| **Water Activity**  E | 40°C + No Sucrose | 25min | 0cm |
| 35 min. | 0cm |
| 45min. | 0cm |
| F | 40°C + 5 g Sucrose | 25min | 19cm |
| 35 min. | 22cm |
| 45min. | 24cm |
| G | 40°C + 30 g. Sucrose | 25min | 21.5cm |
| 35 min. | 23.5 |
| 45min. | 25cm |
| H | 40°C + 50 g. Sucrose | 25min | 15.5cm |
| 35 min. | 19cm |
| 45min. | 21cm |

|  |  |  |  |
| --- | --- | --- | --- |
| Test/Flask | Condition | Fermentation observed | Gas produced cm3 |
| **pH**  A | 40°C + pH3 | 25min nothing | 0cm |
| 35 min. nothing | 0cm |
| 45min. nothing | 0cm |
| B | 40°C + pH5 | 25min small, but growing. | 13cm |
| 35 min. grown little | 14cm |
| 45min. not completed | Not completed |
| C | 40°C + pH7 | 25min medium balloon, a lot of foam | 18cm |
| 35 min. Not a lot more Co2. But more foam. | 19cm |
| 45min. not completed | Not completed |
| D | 40°C + pH10 | 25min nothing | 0cm |
| 35 min. nothing | 0cm |
| 45min. nothing | 0cm |
| **Nutrient**  E | 40°C + 5 g. Fructose | 25min  Very little gain; balloon is not standing up | 5cm |
| 35 min.  Small gain; balloon is still not standing up | 7cm |
| 45min.  Balloon is filling up and no longer hangs over the side of glass | 16cm |
| F | 40°C + 5 g Dextrose | 25min  Very little gain; balloon is not standing up | 5.5cm |
| 35 min.  Small gain; balloon is still not standing up | 7cm |
| 45min.  Balloon is filling up and no longer hangs over the side of glass | 15cm |
| G | 40°C + 5 g. Sucrose | 25min  Very little gain; balloon is not standing up | 6cm |
| 35 min.  Small gain; balloon is still not standing up | 9.5cm |
| 45min.  Balloon is filling up and no longer hangs over the side of glass | 15cm |
| H | 40°C + 5 g.Maltose | 25min  Very little gain; balloon is not standing up | 6cm |
| 35 min.  Small gain; balloon is still not standing up | 9cm |
| 45min.  Balloon is filling up and no longer hangs over the side of glass | 15cm |